NASA Facts

National Aeronautics and
Space Administration

NASA Headquarters
Public Affairs Office
Code P
300 E Street SW
Washington, DC 20546

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An Overview of NASA

The guiding principles for U.S. exploration of air and space have remained remarkably consistent for more than 80 years. In 1915, when aviation was still in its infancy, Congress created an organization that would "supervise and direct the scientific study of the problems of flight, with a view to their practical solutions." That organization, the National Advisory Committee for Aeronautics, evolved into NASA four decades later when Congress formed a civilian agency to lead "the expansion of human knowledge of phenomena in the atmosphere and space."

The journey begun in 1915 has taken American aviators, astronauts, and robotic spacecraft from the dunes of Kitty Hawk to the edge of the atmosphere and to the surface of the Moon and Mars. American spacecraft have explored more than 60 worlds in our solar system, while methodically peering back in space and time to reveal many of the secrets of the universe.

Benefits

Expanding the realm of human knowledge through a systematic program of exploration and discovery, NASA's work continues to benefit the Nation:

Virtually every aircraft in use today utilizes technology pioneered by NASA. Aeronautics is one of the nation's strongest industries, employing almost 1 million Americans.

The U.S. aerospace industry generates more than $40 billion in annual exports and almost $30 billion in positive balance of trade each year.

New industries have been built on the technology that made space exploration possible, including personal computers, advanced medical equipment, communications satellites, weather forecasting, and natural resource mapping.

NASA's high-technology research and development provide a return on investment by generating jobs, the demand for goods and services, and new opportunities as advanced technologies spin off into the private sector.

The Agency at a Glance

NASA employs 17,700 civil servants and generates thousands of high-tech jobs in the private sector.

The Agency operates nine Field Centers, the contractor-operated Jet Propulsion Laboratory, and the Wallops Flight Facility nationwide.

The Fiscal Year 2000 NASA budget is $13.6 billion.

NASA On-Line Services

NASA provides a variety of on-line services via the Internet. The URL's listed below provide key information about each of the topics. In addition, photographs, scientific and technical information, news releases, and organizational data are accessible through a number of World Wide Web sites. Other key starting points for exploring NASA on the "net" is listed below.

NASA's main Web site is: *http://www.nasa.gov*

The NASA Public Affairs Web site is:
http://www.nasa.gov/hqpao/hqpao_home.html

1999 Scientific and Technical Accomplishments

Hubble Illuminates Universe's Rate of Expansion

Hubble scientists found a value for how fast the universe is expanding after eight years of painstaking measurement. The rate of expansion, called the Hubble Constant, is essential to determining the age and size of the universe. Measuring Hubble's constant was one of the three major goals for the telescope when it was launched in 1990.
http://oposite.stsci.edu/pubinfo/pr/1999/19/index.html

Astronomers Find Evidence of First Planet Orbiting a Pair of Stars

Astronomers funded by NASA witnessed for the first time a distant planet passing in front of its star, providing direct and independent confirmation of the existence of extrasolar planets that, to date, has been inferred only from the wobble of their star.
http://bustard.phys.nd.edu/MPS/

Mars Global Surveyor Provides First Global 3-D Map of Mars

An impact basin, deep enough to swallow Mount Everest, and surprising slopes in Valles Marineris, highlight a global map of Mars that will influence scientific understanding of the red planet for years. Generated by the Mars Orbiter Laser Altimeter (MOLA), the high-resolution map represents 27 million measurements gathered in 1998 and 1999.
http://ltpwww.gsfc.nasa.gov/tharsis/mola.html

Gamma Ray Burst Imaged for First Time

Racing the clock, astronomers managed to take the first-ever optical images of one of the most powerful explosions in the Universe—a gamma ray burst—just as it was occurring on January 23, 1999. Such bursts occur with no warning and typically last just for a few seconds.
http://science.nasa.gov/newhome/headlines/ast27jan99_1.htm

First Female Space Shuttle Commander

Orbiter *Columbia*'s 26th flight (July 22-27, 1999) was led by Air Force Col. Eileen Collins, the first woman to command a Shuttle mission. STS-93 successfully carried to orbit the Chandra X-Ray Observatory, the third of NASA's "Great Observatories," joining the Hubble Space Telescope and the Compton Gamma Ray Observatory.
http://spaceflight.nasa.gov/shuttle/archives/sts93/index.html

First Docking of Space Shuttle with International Space Station

STS-96 was the four-million-mile flight of *Discovery*, from May 27 to June 6, on which the crew performed the first Shuttle docking to the International Space Station and delivered more than 3600 pounds of supplies—ranging from food and clothes to laptop computers—for the first crew to live on the Station next year.
http://spaceflight.nasa.gov/shuttle/archives/sts96/index.html

New Technology to Help Planes Land More Safely in Bad Weather

NASA and industry partners have developed new technology to allow planes to land safely in bad weather on parallel runways spaced as closely as 2,500 feet apart. Airports where this new approach, which expands on existing communication and navigation technology, could improve on-time arrivals are Detroit, Seattle, Minneapolis, and Memphis.
http://www.aero-space.nasa.gov/

Chandra, Third Great Observatory, Begins Work

In September, after barely two months in space, NASA's Chandra X-Ray Observatory took a stunning image of the Crab Nebula, the most intensively studied object beyond our solar system, and revealed something never seen before: a brilliant ring around the nebula's heart.
http://chandra.nasa.gov/chandra.html

X-34 Rocket Plane Takes to the Sky for Safety Checks

Locked to the belly of its newly modified L-1011 carrier aircraft, a test version of NASA's X-34 rocket plane made its first flight in June as part of a certification process. The prototype of the robotic spacecraft will test new technologies and methods of operations needed to develop low-cost reusable space vehicles.
http://stp.msfc.nasa.gov/pathfinder/pathindex.html

Flagship of NASA's Earth Observing System Launched December 18

Almost on the eve of the millennium, Terra was launched into space from Vandenberg Air Force Base, CA, and is operating as expected. The mission will enable new research into the ways that Earth's land, oceans, air, ice and life interact as a whole climate system.
http://terra.nasa.gov/